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EXAMINER

RAPP, CHAD

ART UNIT

2125

PAPER NUMBER

3

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/005,505

Applicant(s)

ARNOLD ET AL.

Examiner

Chad Rapp

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11, 13-16, 19 and 21 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 12, 17, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 12/05/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-21 are presented for examination.

***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "60" has been used to designate both BROMS and disk drive. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "34" has been used to designate both RAM and building facilities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
4. In addition to the drawings correction the specification has to be corrected in kind.
5. The examiner has provided a number of examples of the drawing deficiencies in the above, however, the list of deficiencies may not be all inclusive. Applicant should refer to these as examples of deficiencies and should make all the necessary corrections to eliminate the drawing objections.

***Specification***

6. The disclosure is objected to because of the following informalities:

On page 11, lines 5-6 "input and output adapters 41" does not match figure 3 where input/output is 40".

On page 11, line 19 "disk drive 38 in BROMS" is number 60 in figure 3.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 9 and 15-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the testing facilities" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the operation" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

9. Claims 5, 6, 12, 17, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

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102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

11. Claims 1, 2 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Pape et al.

Pape et al. teaches the claimed invention ( claim 1) including:

a. Pre-packing facilities in which components are converted into completed products is taught as an assembly station(col. 3 lines 52-61);

b. Packaging facilities in which the completed products are packaged is taught as a boxing station(col. 3 line 67 to col. 4 line 2);

c. An order management system that associates individually identified products among the completed products with a customer order is taught as a manufacturing control system reads a barcode on products and updates a database. Also this database is compared with a pending order to determine whether all of the products are available for shipping(col. 6 lines 39-63);

d. Product release logic in the order management system that accumulates the individually identified products in the pre-packaging facilities and releases the individually identified products for transport from the pre-packaging facilities to the packaging facilities only after determining that substantially all of the individually identified products for the customer order have been completed is taught as the order release determination. Pending orders are

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compared to see if all products in order are available. If all products are available the products are sent to the shipping area(col. 6 line 25 to col. 7 line 32).

As to claim 2, Pape et al. teaches wherein the product release logic in the order management system releases the individually identified products for transport to the packaging facilities only after determining that one hundred percent of the individually identified products for the customer order have been completed is taught as the order release determination.

Pending orders are compared to see if all products in order are available. If all products are available the products are sent to the shipping area. Of all the products are available than that is the same as one-hundred percent available(col. 6 line 25 to col. 7 line 32).

As to claim 7, Pape et al. teaches:

a.       Wherein the pre-packaging facilities are used to assemble multiple sets of products for multiple customer order is taught as assembly unit has multiple assembly lines for assembling multiple components at a time (col. 3 lines 52-61 and fig. 1);

b.       The order management system further comprises location report logic that produces a location report identifying a location for at least one product among the multiple sets of products, based on at least one product attribute is taught as information regarding the location and status of the various devices, materials and other inputs and outputs are collected by reading barcodes of devices by a scanner(col. 5 lines 8-24 and col. 6 lines 40-52).

As to claim 8, Pape et al. teaches the factory wherein

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a. The at least one product attribute comprises a unique identifier for a specific product among the multiple sets of products is taught as a barcode(col. 4 lines 45-46, col. 5 lines 8-24 and col. 6 lines 40-52);

b. The location report identifies a specific location for the specific product is taught as information regarding the location and status of the various devices, materials and other inputs and outputs are collected by reading barcodes of devices by a scanner(col. 5 lines 8-24 and col. 6 lines 40-52).

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

13. Claims 14 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Pape et al. Pape et al. teaches the claimed invention (claim 14) including:

a. Assembling components in the pre-packaging facilities into multiple products for a customer order, wherein each of the multiple products is uniquely identified and assigned to the customer order is taught as is taught as an assembly station and a barcode tracking label(col. 3 lines 52-61 and col. 6 line2 33-35);

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b. Accumulating the multiple products in the pre-packaging facilities is taught as ASRS(col. 4 lines 7-10);

c. Releasing the multiple products for transport from the pre-packaging facilities to the packaging facilities only after determining that substantially all of the multiple products for the customer order have been completed a. The pre-packaging facilities comprise assembling facilities and testing facilities is taught as the assembling and testing sties9abstract)

As to claim 19, Pape et al. teaches:

a. Assembling multiple sets of products for multiple customer orders is taught as assembly unit has multiple assembly lines for assembling multiple components at a time (col. 3 lines 52-61 and fig. 1);

b. Producing a location report that identifies a location for at least one product among the multiple sets of products, based on at least one product attribute is taught as information regarding the location and status of the various devices, materials and other inputs and outputs are collected by reading barcodes of devices by a scanner(col. 5 lines 8-24 and col. 6 lines 40-52).

***Claim Rejections - 35 USC § 103***

14 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 3, 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pape et al. in view of Saka et al.

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Pape et al. teaches the claimed invention (claim 1)see paragraph number 11 above.

As to claim 3, Saka et al. wherein the order management system releases the individually identified products for transport to the packaging facilities by producing one or more pick reports that identify the individually identified products to be released is taught as a production system outputs a delivery order sheets for preparation packing to packing site(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because making a hard copy by the computer system printer less mistakes can be rather than letting the personnel record the orders by hand. Makes the system more reliable.

As to claim 4, wherein

Pape et al. teaches :

a. The pre-packaging facilities comprises testing facilities is taught as tests are preformed ( col. 3 lines 63-64).

Saka et al. teaches :

a. The product release logic causes the individually identified products for the customer order to accumulate in the testing facilities until substantially all of the individually identified products have tested good is taught as transporting a products determined non-defective to packing site(col. 2 lines 5-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because Saka et al. invention allows a versatile production system where different products can be made

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on the same production line This makes the very flexible o be able to meet changing market demands. Also both prior art patents deal with a assembling, testing and packing sites.

As to claim 9, Saka et al. teaches:

- a. The at lest one product attribute comprises an order number for a specific order among the multiple customer orders is taught as a control number(col. 4 line 16);
- b. The location report identifies which of the products for the specific order are located in the testing facilities is taught as the ID card is attached to the product which matches the flow of an article (where it is) and manufacturing data is read by a line host controller(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because the Saka et al. allows the tracking of components and products and parts through out the whole process from beginning to finished product. Allows to keep track of errors from the testing site and all the information produced is used to modify the process or to optimize the process.

As to claim 10, Saka et al. teaches:

- a. The at least one product attribute comprises a component of one or more products among the multiple sets of products is taught as bar codes attached to parts(col. 4 line 22);
- b. The location report identifies specific locations for the one or more products that include the component is taught as the ID card is attached to the product which matches the flow of an article (where it is) and manufacturing data is read by a line host controller(abstract).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because the Saka et al. allows the tracking of components and products and parts through out the whole process from beginning to finished product. Allows to keep track of errors from the testing site and all the information produced is used to modify the process or to optimize the process.

As to claim 11, Saka et al. teaches:

- a. The at least one product attribute comprises a product model is taught as a product code(col. 4 line 16);
- b. The location report identifies specific locations for the one or more products that include the component is taught as the ID card is attached to the product which matches the flow of an article (where it is) and manufacturing data is read by a line host controller(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because the Saka et al. allows the tracking of components and products and parts through out the whole process from beginning to finished product. Allows to keep track of errors from the testing site and all the information produced is used to modify the process or to optimize the process.

As to claim 13,

Pape et al. teaches :

- a. The completed products comprise information handling systems that have been assembled in the assembling facilities and tested in the testing facilities is taught as manufacturing computer systems(col. 2 lines 26-28);

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b. The packaging facilities comprise boxing facilities in which the completed information handling system are boxed is taught as the boxing station(col. 3 line 67 to col. 4 line 2);

c. The product release logic in the order management system accumulates the information handling systems in the testing facilities and release the information handling systems for the customer order for transport from the testing facilities to the boxing facilities only after substantially all of the information handling systems for the customer order have been assembled and have tested good is taught as the assembly and system tests and additional tests are performed , after this the computer systems are sent to the boxing station and then a manufacturing control system reads a barcode on products and updates a database. Also this database is compared with a pending order to determine whether all of the products are available for shipping(col. 2 lines 26-28, col. 3 line 51 to col. 4 line 2 and col. 6 lines 39-63).

Saka et al. teaches :

a. The pre-packaging facilities comprise assembling facilities and testing facilities is taught as the assembling and testing sties(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because having the testing and assembling in the prepacking area is important because you do not want the products testing in the shipping area or packing area because you would have to unpack and fix what was wrong. Increases the cost of packing and the time it takes to get the products to the customer.

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16 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pape et al. in view of Saka et al.

Pape et al. teaches the claimed invention (claim 14)see paragraph number 13 above.

As to claim 15, Saka et al. teaches wherein the operation of releasing the multiple products comprises producing one or more pick reports that identify the multiple products to be released is taught as a production system outputs a delivery order sheets for preparation packing to packing site(abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because making a hard copy by the computer system printer less mistakes can be rather than letting the personnel record the orders by hand. Makes the system more reliable.

As to claim 16, Pape et al. teaches:

a. Retrieving the multiple products to be released from the pre-packaging facilities for transport to the packaging facilities for transport to the packaging facilities, based on the one or more pick reports, wherein two or more individuals retrieve the multiple products is taught as one or more systems maybe temporarily stored until all items in order are ready for shipment(col. 4 lines 7-10);

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b. Producing a productivity report that identifies how many products have been retrieved by each of the two or more individuals is taught as updating databases on released orders(col. 7 lines 55-58).

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pape et al. in view of Saka et al.

Pape et al. teaches the claimed invention (claim 21) substantially as claimed including a program product for managing a factory in which customized products are built in response to customer orders comprising:

a. A computer useable medium is taught as a computer-useable medium (col. 14 line 46);

b. Computer instructions encoded in the computer medium, wherein, when executed the computer instruction perform operations is taught as encoded logic(col. 14 lines 46-47);

c. Associating a set of products with a customer order such that each of the products in the set is uniquely identified and assigned to the customer order is taught as tracking label with unique identifying information for each product(col. 4 lines 45-46);

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d. Accumulating the set of products for the customer order in the testing facilities is taught as ASRS(col. 4 lines 7-10);

e. Automatically determining whether substantially all of the products in the set have been completed, based on the test status is taught as the assembly and system tests and additional tests are performed , after this the computer systems are sent to the boxing station and then a manufacturing control system reads a barcode on products and updates a database. Also this database is compared with a pending order to determine whether all of the products are available for shipping(col. 2 lines 26-28, col. 3 line 51 to col. 4 line 2 and col. 6 lines 39-63).

f. Automatically releasing the set of products for transport from the testing facilities to the packaging facilities only after determining that substantially all of the products for the customer order have been completed, such that the program product causes one or more of the products in the set to accumulate in the testing facility after the one or more products in the set have tested good is taught as the assembly and system tests and additional tests are performed , after this the computer systems are sent to the boxing station and then to the ASRS to wait for order completion. A manufacturing control system reads a barcode on products and updates a database. Also this database is compared with a pending order to determine whether all of the products are available for shipping(col. 2 lines 26-28, col. 3 line 51 to col. 4 line 2 and col. 6 lines 39-63).

Pape et al. teaches the above listed details of the independent claim 21, however, Pape et al. does not teach: monitoring test status for the set of products

a. Monitoring test status for the set of products is taught as host line controllers in communications with the testing facilities(abstract).

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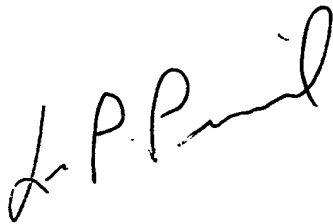
It would have been obvious to one of ordinary skill in the art at the time the invention was made or used to modify the teachings of Pape et al. with the teachings of Saka et al. because having the testing monitored by the system allows the system to take all information and use it to optimize the system based on certain testing defects.

***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Rapp whose telephone number is (703)306-4528. The examiner can normally be reached on Mon-Fri 11:00-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chad Rapp  
Examiner  
Art Unit 2125

cjr

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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**